



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

Yoji Sakagami et al.

Application No.: 10/078,678

Filing Date: February 21, 2002

Group Art Unit: 1638

Examiner: RUSSELL KALLIS

Confirmation No.: 4782

Title: PRECURSOR POLYPEPTIDE OF PHYTOSULFOKINE DERIVED FROM ARABIDOPSIS THALIANA  
AND A GENE ENCODING SAID POLYPEPTIDE

AMENDMENT/REPLY TRANSMITTAL LETTER

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Enclosed is a reply for the above-identified patent application.

- ☐ A Petition for Extension of Time is also enclosed.
- ☐ Terminal Disclaimer(s) and the ☐ \$55.00 (2814) ☐ \$110.00 (1814) fee per  
Disclaimer due under 37 C.F.R. § 1.20(d) are also enclosed.
- ☒ Also enclosed is/are a certified copy of Japanese Priority Patent Application No. 2001-052946  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- ☐ Small entity status is hereby claimed.
- ☐ Applicant(s) requests continued examination under 37 C.F.R. § 1.114 and enclose the  
☐ \$385.00 (2801) ☐ \$770.00 (1801) fee due under 37 C.F.R. § 1.17(e).
- ☐ Applicant(s) requests that any previously unentered after final amendments not be entered.  
Continued examination is requested based on the enclosed documents identified above.
- ☐ Applicant(s) previously submitted \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ on \_\_\_\_\_,  
for which continued examination is requested.
- ☐ Applicant(s) requests suspension of action by the Office until at least \_\_\_\_\_,  
which does not exceed three months from the filing of this RCE, in accordance with 37 C.F.R.  
§ 1.103(c). The required fee under 37 C.F.R. § 1.17(i) is enclosed.
- ☐ A Request for Entry and Consideration of Submission under 37 C.F.R. § 1.129(a) (1809/2809) is also  
enclosed.

- ☒ No additional claim fee is required.
- ☐ An additional claim fee is required, and is calculated as shown below.

AMENDED CLAIMS					
	No. of Claims	Highest No. of Claims Previously Paid For	Extra Claims	Rate	Additional Fee
Total Claims		MINUS 20 =	0	x \$18.00 (1202) =	\$ 0.00
Independent Claims		MINUS 3 =	0	x \$86.00 (1201) =	\$ 0.00
If Amendment adds multiple dependent claims, add \$290.00 (1203)					
Total Claim Amendment Fee					\$ 0.00
<input type="checkbox"/> Small Entity Status claimed - subtract 50% of Total Claim Amendment Fee					\$ 0.00
<b>TOTAL ADDITIONAL CLAIM FEE DUE FOR THIS AMENDMENT</b>					<b>\$ 0.00</b>

- ☐ A check in the amount of \_\_\_\_\_ is enclosed for the fee due.
- ☐ Charge \_\_\_\_\_ to Deposit Account No. 02-4800.
- ☐ Charge \_\_\_\_\_ to credit card. Form PTO-2038 is attached.

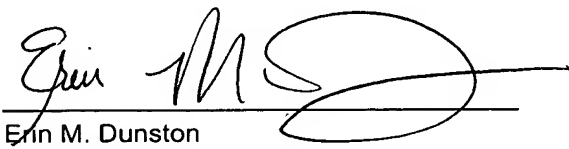
The Director is hereby authorized to charge any appropriate fees under 37 C.F.R. §§ 1.16, 1.17, 1.20(d) and 1.21 that may be required by this paper, and to credit any overpayment, to Deposit Account No. 02-4800. This paper is submitted in duplicate.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

P.O. Box 1404  
Alexandria, Virginia 22313-1404  
(703) 836-6620

Date: June 23, 2004

By   
Erin M. Dunston  
Registration No. 51,147



Patent  
Attorney's Docket No. 026350-071

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of	)	
Yoji Sakagami et al.	)	Group Art Unit: 1638
Application No.: 10/078,678	)	Examiner: RUSSELL KALLIS
Filed: February 21, 2002	)	Confirmation No.: 4782
For: PRECURSOR POLYPEPTIDE OF	)	
PHYTOSULFOKINE DERIVED	)	
FROM ARABIDOPSIS THALIANA	)	
AND A GENE ENCODING SAID	)	
POLYPEPTIDE	)	

**RESPONSE TO RESTRICTION REQUIREMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

**Applicants Elect, With Traverse, Group III For Examination**

In complete response to the Official Action (Restriction Requirement) mailed May 25, 2004 (Paper No. Unknown), in regard to the subject application, Applicants respectfully elect, with traverse, Group III (Claims 2-6 and 13-16) for examination.

**Applicants Request That All Four Groups Be Examined Together**

Applicants respectfully request that the Examiner modify the requirement for restriction and consider all four Groups together.

**A. Substantive Reasons For Examination Of All Four Groups**

**1. Groups I and III Are Related**

At a minimum, Applicants respectfully request that the Examiner modify the requirement for restriction and consider at least Group III with Group I. Group III is

drawn to not only the gene of SEQ ID NO:2, but also transformed plant cells and methods of promoting proliferation of plant cells transformed with a polynucleotide of SEQ ID NO:1. Group I is drawn to a precursor peptide of Claim 1, which is defined by SEQ ID NO:1 or a polypeptide having more than 70% sequence homology therewith. As evidenced by the content of Group III, SEQ ID NO:2 encodes the precursor peptide of SEQ ID NO:1. As such, SEQ ID NOs 1 and 2 are related and Applicants believe Groups I and III should be examined together.

2. Groups II and IV Are Related

Similarly, Group IV is drawn not only to the gene of SEQ ID NO:4, but also to transformed plant cells and methods of promoting proliferation of plant cells transformed with a polynucleotide of SEQ ID NO:3. Group II is drawn to a precursor peptide of Claim 7, which is defined by SEQ ID NO:3 or a polypeptide having more than 70% sequence homology therewith. As evidenced by the content of Group IV, SEQ ID NO:4 encodes the precursor peptide of SEQ ID NO:3. As such, SEQ ID NOs 3 and 4 are related and Applicants believe Groups II and IV should be examined together.

3. Groups I, II, III, and IV Are Related

All four Groups pertain to precursor polypeptides of phytosulfokine that enhance cell proliferation. See, e.g., *Specification, Page 5, ¶ 0013*. As such, all four Groups are related and should be examined together.

**B. Statutory Reasons For Examination Of All Four Groups**

1. Examination Of Ten Sequences Is Reasonable

Applicants respectfully traverse the restriction as it limits Applicants to one or two sequences. Applicants believe that the pending Restriction Requirement is overly restrictive in view of M.P.E.P. § 803.04 which states that:

without creating an undue burden on the Office, the Commissioner has decided *sua sponte* to partially waive the requirements of 37 C.F.R. § 1.141 *et seq.* and permit a reasonable number of such nucleotide sequences to be claimed in a single application . . . **normally ten sequences constitutes a reasonable number for examination purposes.** (emphasis added)

Here, examination of all four Groups, Groups I to IV, would require examination of a mere four (4) sequences, well under the reasonable number of ten (10).

2. Examination Of All Four Groups Would Not Create A Serious Burden

Finally, independent of the foregoing reasons, Applicants respectfully request examination of all four Groups based upon the mandate of M.P.E.P. § 803: "[i]f the search and examination of an entire application can be made **without serious burden**, the examiner **must** examine it on the merits, even though it includes claims to independent or distinct inventions." (emphasis added). Given at least the present ease of searching sequences and literature using readily-available software,

Applicants respectfully request simultaneous examination of Groups I-IV because it does not pose a serious burden.

Respectfully submitted,  
BURNS, DOANE, SWECKER & MATHIS, L.L.P.

Date: June 23, 2004

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